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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/779,844	02/09/2001	Sawao Iwatani	21.1993	5417

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EXAMINER
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VU, THONG H

ART UNIT	PAPER NUMBER
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2142

DATE MAILED: 08/29/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/779,844

Applicant(s)

IWATANI, SAWAO

Examiner

Thong H. Vu

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 08 August 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 126 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-26 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

1. Claims 1-26 are pending.

***Response to Arguments***

2. Applicant's arguments with respect to claims 1-26 have been fully considered and are persuasive. However, upon further consideration, a new ground(s) of rejection is made in view of Nolan.

3. Claim 15 contains the negative limitation.

Any negative limitation or exclusionary proviso must have basis in the original disclosure. If alternative elements are positively recited in the specification, they may be explicitly excluded in the claims. See *In re Johnson*, 558 F.2d 1008, 1019, 194 USPQ 187, 196 (CCPA 1977) ("[the] specification, having described the whole, necessarily described the part remaining."). See also *Ex parte Grasselli*, 231 USPQ 393 (Bd. App. 1983), *aff'd mem.*, 738 F.2d 453 (Fed. Cir. 1984). The mere absence of a positive recitation is not basis for an exclusion. Any claim containing a negative limitation which does not have basis in the original disclosure should be rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. Note that a lack of literal basis in the specification for a negative limitation may not be sufficient to establish a *prima facie* case for lack of descriptive support. *Ex parte Parks*, 30 USPQ2d 1234, 1236 (Bd. Pat. App. & Inter. 1993). See MPEP § 2163 - § 2163.07(b) for a discussion of the written description requirement of 35 U.S.C. 112, first paragraph.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

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(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-26 are rejected under 35 U.S.C. § 102(e) as being anticipated by Nolan et al

[Nolan 6,640,278 B1].

4. As per claim 20, Nolan discloses a method of a storage area network system [Nolan, abstract], comprising:

integrating and controlling the storage area network by an integrated management mechanism managing access relationships between host computers of the storage area network and storage devices of the storage area network [Nolan, systems and methods for storage domain management, storage area network, integrate legacy and new equipment, host based applications col 2 lines 1-41; storage management task, col 34 lines 1-14].

5. As per claim 21, Nolan discloses establishing access paths between the host computers and the storage devices, said access paths being established and controlled by the integrated management mechanism [Nolan, access path, col 34 lines 40-55; col 35 lines 25-39].

6. As per claim 22, Nolan discloses controlling by the integrated management mechanism access to regions of the storage devices by the host computers network [Nolan, logical definition of zones, col 34 lines 40-55].

7. As per claim 23, Nolan discloses establishing by the integrated management mechanism storage affinity (i.e.: setting) based on the access paths [Nolan, logical definition of zones, col 34 lines 40-55].

8. As per claim 24, Nolan discloses establishing zoning for switches interconnecting the host computers and the storage devices of the storage area network [Nolan, zones, col 34 lines 40-55].

9. As per claim 25, Nolan discloses establishing settings in storage management mechanisms of respective storage devices [Nolan, RAID, col 8 lines 9-15, et seq].

10. As per claim 26, Nolan discloses the integrated management mechanism integrates related, reported problems into a single problem report [Nolan, error encounter, col 23 lines 1-20].

11. As per claims 4-5, contains a similar limitations set forth in claim 20. Therefore claims 4-5 are rejected for the same rationale set forth in claim 20.

12. As per claim 6, Nolan discloses a Storage devices in a storage area network system including host computers and switches, and an integrated management mechanism integrating and managing the storage area network system, each of said storage devices comprising:

a storage management mechanism establishing conditions of access restrictions for the storage device based on access restriction information transmitted by the integrated management mechanism, said switches interconnecting the host computers and the storage devices [Nolan, the use of cache is restricted, col 27 lines 12-18].

13. As per claim 7, contains a similar limitations set forth in claim 6. Therefore claim 7 is rejected for the same rationale set forth in claim 6.

14. As per claim 1, Nolan discloses a storage area network management system comprising:  
host computers, each comprising a storage area network management mechanism [Nolan, server or host and storage network, Fig 1]; storage devices, each comprising a storage management mechanism [Nolan, Host manager, col 23 lines 44-65];

switches coupled to the host computers and to the storage devices, said switches interconnecting the host computers and the storage devices, each of the switches comprising a region-setting mechanism [Nolan, hub 1204, Fig 1];

an integrated management mechanism integrating and controlling the storage area network, said integrated management mechanism including access **route information** of the host computers and the storage devices [Nolan, routing information, col 17 lines 30-45] and, based on said access route information, transmitting access management information to the storage devices and the storage area network management mechanisms of the host computers, transmitting region information to the region-setting mechanisms of the switches [Nolan, access paths, zones, col 34 lines 40-55], and transmitting access limit (i.e.: restrict) information

concerning the host computers to the storage management mechanisms of the storage devices  
[Nolan, restricted, col 27 lines 12-18].

15. As per claim 2, Nolan-Blumenau disclose the integrated management mechanism obtaining a configuration status of the storage area network from each of the storage devices, the switches, and the host computers and stores said configuration status as storage area network configuration settings information, and wherein at regular intervals, or when instructed by a system administrator, the integrated management mechanism gathers current configuration status of the storage area network, compares the current configuration status to the configuration settings information that was collected, and detects discrepancies based upon the comparison [Nolan, configuration logic, col 17 lines 21-35; storage mapping, col 24 lines 35-col 26 lines 22; LUN mapping col 26 line 25-col 27 line 30].

16. As per claim 3, Nolan-Blumenau disclose the integrated management mechanism obtaining information on the access relationships from the host computer storage area network management mechanism, switches and/or the storage devices, and checking the compatibility of the access paths and, if the integrated management mechanism finds any access paths which are **not** set up correctly, sending out a notice about problems in a section corresponding thereto [Nolan, notification, col 31 lines 11].

17. As per claim 15, Nolan-Blumenau disclose a storage area network system comprising:

host computers; storage devices, each comprising a storage management mechanism; switches, each switch having a region setting mechanism, interconnecting the host computers and the storage devices; and

an integrated management mechanism integrating and controlling the storage area network and comprising access path information of the host computers and storage devices, wherein using said access path information, the integrated management mechanism transmitting access management information to the storage devices and to the storage area network management mechanism, transmitting region information to the region-setting mechanisms of the switches, and transmitting access restriction information concerning the host computers to the storage management mechanisms of the storage devices [Nolan, logical definition of zones, col 34 lines 40-55],

wherein when the storage area network management system is started up and the access path information has not been set up the integrated management mechanism first sets up the region-setting mechanisms of the switches so that **no** access is permitted (i.e.: restricted), and, after that, the integrated management mechanism sets up regions on the regions setting mechanisms of the switches [Nolan, restricted, col 27 lines 12-18].

18. As per claim 8, Nolan-Blumenau disclose a computer-readable medium including a program which program, when executed by a computer, causes the computer to execute the processes comprising:



integrating and controlling a storage area network including host computers and storage devices connected by switches each switch having a region setting mechanism, through fiber channels [Nolan, Fig 8, col 3 lines 53-55], said processes further comprising:

transmitting access management information to the storage devices and storage area network management mechanisms of the host computers based on the access path information of the storage devices and the host computers, transmitting region information to the region setting mechanisms of the switches, transmitting access restriction information about the host computers to storage management mechanisms of the storage devices, and managing access relationships between the hosts and storage devices [Nolan, restricted, col 27 lines 12-18; logical definition of zones, col 34 lines 40-55].

19. As per claims 9-14,16-19 contain a similar limitations set forth in claims 1-3. Therefore claims 9-14,17-19 are rejected for the same rationale set forth in claims 1-3.

20. Any inquiry concerning this communication or earlier communications from the examiner should be directed to examiner *Thong Vu*, whose telephone number is (571)-272-3904. The examiner can normally be reached on Monday-Thursday from 8:00AM- 4:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, *Andrew Caldwell*, can be reached at (571) 272-3868. The fax number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval IPAIRI system. Status information for published applications may be obtained from either Private PMR or Public PMR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

*Thong Vu*  
**Patent Examiner**  
**Art Unit 2142**

